STATEMENT OF BASIS

ST. CHARLES OPERATIONS - UNIT 9
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operation prior to 1969. Unit 9 started construction and operations under Permit No. 2876-V0 issued June 07, 2004. A modification, Permit No. 2876-V1, was issued on August 10, 2006 and later amended on October 23, 2006. Unit 9 is currently operating under this permit.

This is the Part 70 operating permit renewal and modification for Unit 9. This permit addresses all emissions unit at Unit 9.

A number of Part 70 permits addressing other process units at the UCC have already been issued. These include:

Permit No.	Plant or Source	Date Issued
2422-V1	Olefins I & II	9/30/2004 *
2656-V0	Olefins Distribution/Site Logistics Units	3/13/2006 ***(Amended 3/28/2007)***
2214-V0	LP-6	3/27/2006
2254-V0	Acrylics 2	6/19/2006 ***(Amended 7/20/2007)***
513-V2	Acrylics I	6/15/2007
1909-V1	Higher Glycols Plant	6/18/2007
2446-V1	Unit 8 (EXP)	7/3/2007
2257-V4	TB1 and TB2 Units	10/9/2007
2343-V1	Energy Systems	1/31/2008
2814-V1	MGE Plant	2/28/2008
2858-V0	PXC Unit	***(Rescinded 4/8/2008)***
373-V2	Oxide II	6/13/2008
477-V0	Unit 5 (Amines I)	***(Rescinded 7/12/2008)***
1912-V1	SPU	6/25/2009
2350-V4	LP-3 Unit	7/20/2009
2104-V2	Environmental Operations Plant	9/25/2009
2421-V1	Amines Plants	10/15/2009
476-V2	Oxide I Plant	1/26/2010

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V. PROPOSED PERMIT/PROJECT INFORMATION

A permit application and Emission Inventory Questionnaire dated December 3, 2008 were submitted by Union Carbide Corp requesting a Part 70 operating permit renewal and modification for Unit 9. Additional information dated December 11, 2009 and February 18, 2010, was also received.

Process Description

Unit 9 is a latex manufacturing plant at the Taft/Star manufacturing site.

Raw materials are received in bulk quantities (barges, bulk railcars and tank trucks) and offloaded into dedicated storage tanks. Hazardous or odorous materials are vapor balanced to the shipping container to minimize losses. Smaller volume raw materials (bags, totes drums supersacks) as well as raw material from pipelines, are fed directly from the shipping container to the process, or transferred into a feed tank system that allows for dissolution into water or mixture with other materials.

Raw materials are then fed to the reactor as defined by the product recipe. The reaction is a polymerization that is exothermic. Reactor temperature is controlled with a tempered water jacket system.

After the reaction is complete, the contents of the reactor (latex) are transferred to the Post Reactor. Here, additional raw materials are added to further reduce un-reacted raw materials (monomers). The latex in the post reactor is then cooled.

When downstream equipment is available, the post reactor is transferred into the adjusting tank. Here, the final latex is sampled and adjusted for percentage polymer. If required by the recipe, cooling takes place in this vessel.

The product is next filtered to remove large particles and then pumped into the shipping containers and/or load tanks. The load tank transfers into shipping containers for transport to customers.

Proposed Modifications

With this renewal modification, UCC proposes the following.

1. UCC informs LDEQ that as of November 22, 2006, construction of the first four reactor trains is complete. Construction of the remaining two trains and associated equipment has been postponed until economic conditions improve. UCC requests

that these sources, EIQ Nos. 4018, 4019, 4020, 4021, 4034, 4035, 4049, 4050, 4051, 4052, 4053, (EQTs 074, 075, 076, 077, 090, 091, 726, 727, 728, 729, 735), be included in this permit so that construction can resume at a future date.

2. This modification moves tanks from the Emission Sources List to the Insignificant Activities list, as they store or will store surfactant only. EQT729 has not been constructed yet. The maximum vapor pressure is 0.45 psia. Based on capacity and vapor pressure, 40 CFR 60 Subpart Kb does not apply per 40 CFR 60.110b (a) or 40 CFR 60.110b (b). 40 CFR 63 Subpart FFFF (MON) does not apply since the equipment does not store any HAPs or stores material where HAPs are at impurity levels.

3. This modification moves two tanks (EIQ Nos. 4054 and 4055) from the Insignificant Activities List to the Emission Sources List.

4. This modification moves Totes EIQ Nos. 193D and 194D (EQTs 730 and 731) from the Emission Sources List to the Insignificant Activities List, based on capacity and true vapor pressure of material stored.

5. This modification separates ARE009 Wastewater into process wastewater, (EIQ PW) and maintenance wastewater (EIQ No. MW), and updates the regulatory tables accordingly.

6. Emission estimating methodology was updated to represent current knowledge of raw materials and product speciation and operating conditions.

7. Unit 9 is in the process of being sold to Arkema Chemical Co. As part of the sale, two storage tanks from Site Logistics, Permit No. 2656-V0, and two sumps from Environmental Operations, Permit No. 2104-V2, are being included in the Unit 9 permit. The Site Logistics and EnvOps permits will be amended to remove these sources.

There is no new construction, physical or operational changes proposed with this permit renewal application. Any changes in emissions are due to the reconciliation of emissions based on updated emission factors, calculation methodologies, and current knowledge of existing operations. Proposed emissions increases were updated to be consistent with current process knowledge and future constructions (check the first proposed update above). Emission increases are not associated with a change in the method of operation.

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VI. ATTAINMENT STATUS OF PARISH

Pollutant	Attainment Status	Designation
$PM_{2.5}$	Attainment	N/A
PM_{10}	Attainment	N/A
SO_2	Attainment	N/A
NO_2	Attainment	N/A
CO	Attainment	N/A
Ozone[2]	Attainment	N/A
Lead	Attainment	N/A

VII. PERMITTED AIR EMISSIONS

Sources of air emissions are listed on the "Inventories" page of the proposed permit.

Estimated emissions of criteria pollutants from the facility, in tons per year (TPY), are as follows:

Pollutant	Before	After	Change
PM_{10}	1.35	1.36	+0.01
SO_2	0.03	0.03	-
NO_X	4.34	4.51	+0.17
CO	3.64	3.79	+0.15
VOC	1.64	2.18	+0.54

PM_{10} and VOC compounds classified as LAC 33:III.Chapter 51-regulated toxic air pollutants (TAP) are speciated below. This list encompasses all Hazardous Air Pollutants (HAP) regulated pursuant to Section 112 of the Clean Air Act. Note, however, all TAPs are not HAPs (e.g., ammonia, hydrogen sulfide).

VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
1,4-Dioxane	<0.01	<0.01	-
Acetaldehyde	<0.01	<0.01	-
Acrylamide	<0.01	0.01	+0.01
Acrylic Acid	0.02	0.06	+0.04
Acrylonitrile	0.04	0.05	+0.01

[2] VOC and NO_X are regulated as surrogates.

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VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Pollutant	Before	After	Change
Ethyl Acrylate	0.02	0.03	+0.01
Ethylene Oxide	<0.01	<0.01	-
Formaldehyde	<0.01	<0.01	-
Glycol Ethers II-S	<0.01	-	-<0.01
Hydroquinone	<0.01	<0.01	-
Methanol	0.01	0.01	-
Methyl Methacrylate	0.21	0.28	+0.07
Propyleneimine	0.01	0.03	+0.02
Styrene	0.05	0.06	+0.01
Vinyl Acetate	0.66	0.68	+0.02
Total	1.02	1.21	+0.19

Non-VOC LAC 33:III Chapter 51 Toxic Air Pollutants (TAPs):

Ammonia	14.63	15.30	+0.67

Facility is a major source of criteria pollutants, a major source of HAPs, and a major source of TAPs.

Permitted limits for individual emissions units and groups of emissions units, if applicable, are set forth in the tables of the proposed permit entitled "Emission Rates for Criteria Pollutants" and "Emission Rates for TAP/HAP & Other Pollutants." These tables are part of the permit.

Emissions calculations can be found in Appendix A-E of the permit application. The calculations address the manufacturer's specifications, fuel composition (e.g., sulfur content), emissions factors, and other assumptions on which the emissions limitations are based and have been reviewed by the permit writer for accuracy.

General Condition XVII Activities

Very small emissions to the air resulting from routine operations that are predictable, expected, periodic, and quantifiable and that are submitted by the applicant and approved by the Air Permits Division are considered authorized discharges. These releases are not included in the permit totals because they are small and will have an insignificant impact on air quality. However, such emissions are considered when determining the facility's potential to emit for evaluation of applicable requirements. Approved General Condition XVII activities are noted in Section VIII of the proposed permit.

Insignificant Activities

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The emissions units or activities listed in Section IX of the proposed permit have been classified as insignificant pursuant to LAC 33:III.501.B.5. By such listing, the LDEQ exempts these sources or types of sources from the requirement to obtain a permit under LAC 33:III.Chapter 5. However, such emissions are considered when determining the facility's potential to emit for evaluation of applicable requirements.

VIII. REGULATORY APPLICABILITY

Regulatory applicability is discussed in three sections of the proposed permit: Section X (Table 1), Section XI (Table 2), and Specific Requirements. Each is discussed in more detail below.

Section X (Table 1): Applicable Louisiana and Federal Air Quality Requirements

Section X (Table 1) summarizes all applicable federal and state regulations. In the matrix, a "1" represents a regulation applies to the emissions unit. A "1" is also used if the emissions unit is exempt from the emissions standards or control requirements of the regulation, but monitoring, recordkeeping, and/or reporting requirements apply.

A "2" is used to note that the regulation has requirements that would apply to the emissions unit, but the unit is exempt from these requirements due to meeting a specific criterion, such as it has not been constructed, modified, or reconstructed since the regulation has been effective. If the specific criterion changes, the emissions unit will have to comply at a future date. Each "2" entry is explained in Section XI (Table 2).

A "3" signifies that the regulation applies to this general type of source (e.g., furnace, distillation column, boiler, fugitive emissions, etc.), but does not apply to the particular emissions unit. Each "3" entry is explained in Section XI (Table 2).

If blank, the regulation clearly does not apply to this type of emissions unit.

Section XI (Table 2): Explanation for Exemption Status or Non-Applicability of a Source

Section XI (Table 2) of the proposed permit provides explanation for either the exemption status or non-applicability of given federal or state regulation cited by 2 or 3 in the matrix presented in Section X (Table 1).

Specific Requirements

Applicable regulations, as well as any additional monitoring, recordkeeping, and reporting requirements necessary to demonstrate compliance with both the federal and state terms and conditions of the proposed permit, are provided in the "Specific Requirements" section. Any operating limitations (e.g., on hours of operation or throughput) are also set forth in this section. Associated with each Specific Requirement is a citation of the federal or state regulation upon which the authority to include that

Specific Requirement is based.

1. Federal Regulations

40 CFR 60 – New Source Performance Standards (NSPS)

The following subparts are applicable at the Unit 9: A, and Kb. Applicable emission standards, monitoring, test methods and procedures, recordkeeping, and reporting requirements are summarized in the "Specific Requirements" section of the proposed permit.

40 CFR 61 – National Emission Standards for Hazardous Air Pollutants (NESHAP)

The following subparts are applicable at the whole UCC facility: A, M, and FF. Applicable emission standards, monitoring, test methods and procedures, recordkeeping, and reporting requirements are summarized in the "Specific Requirements" section of the proposed permit.

40 CFR 63 – Maximum Achievable Control Technology (MACT)

The following subparts are applicable at Unit 9: A, FFFF, and EEEE. Subpart GGGGG is applicable facility wide. Applicable emission standards, monitoring, test methods and procedures, recordkeeping, and reporting requirements are summarized in the "Specific Requirements" section of the proposed permit.

Clean Air Act §112(g) or §112(j) – Case-By-Case MACT Determinations

A case-by-case MACT determination pursuant to §112(g) or §112(j) of the Clean Air Act was not required.

40 CFR 64 – Compliance Assurance Monitoring (CAM)

Per 40 CFR 64.2(a), CAM applies to each pollutant-specific emissions unit (PSEU) that 1) is subject to an emission limitation or standard, 2) uses a control devices to achieve compliance, and 3) has potential pre-control device emissions that are equal to or greater than 100 percent of the amount, in TPY, required for a source to be classified as a major source.

There are no emissions units at Unit 9 that are subject to CAM.

Acid Rain Program

The Acid Rain Program, 40 CFR Part 72 - 78, applies to the fossil fuel-fired combustion devices listed in Tables 1-3 of 40 CFR 73.10 and other utility units, unless a unit is determined not to be an affected unit pursuant to 40 CFR 72.6(b). LDEQ has incorporated the Acid Rain Program by reference at LAC 33:III.505. Unit 9 is not subject

to the Acid Rain Program.

2. SIP-Approved State Regulations

Applicable state regulations are also noted in Section X (Table 1) of the proposed permit. Some state regulations have been approved by the U.S. Environmental Protection Agency (EPA) as part of Louisiana's State Implementation Plan (SIP). These regulations are referred to as "SIP-approved" and are enforceable by both LDEQ and EPA. All LAC 33:III.501.C.6 citations are federally enforceable unless otherwise noted.

3. State-Only Regulations

Individual chapters or sections of LAC 33:III noted by an asterisk in Section X (Table 1) are designated "state-only" pursuant to 40 CFR 70.6(b)(2). Terms and conditions of the proposed permit citing these chapters or sections are not SIP-approved and are not subject to the requirements of 40 CFR Part 70. These terms and conditions are enforceable by LDEQ, but not EPA. All conditions not designated as "state-only" are presumed to be federally enforceable.

State MACT (LAC 33:III.Chapter 51)

Unit 9 is a major source of LAC 33:III.Chapter 51 regulated TAP. The owner or operator of any major source that emits or is permitted to emit a Class I or Class II TAP at a rate equal to or greater than the Minimum Emission Rate (MER) listed for that pollutant in LAC 33:III.5112 shall control emissions of that TAP to a degree that constitutes Maximum Achievable Control Technology (MACT), except that compliance with an applicable federal standard promulgated by the U.S. EPA in 40 CFR Part 63 shall constitute compliance with MACT for emissions of toxic air pollutants. Applicable Part 63 standards are addressed in Section VIII.1 of this Statement of Basis. MACT is not required for Class III TAPs; however, the impact of all TAP emissions must be below their respective Ambient Air Standards (AAS).

MACT determinations were made pursuant to Chapter 51 and are cited as LAC 33:III.5109.A in the proposed permit.

IX. NEW SOURCE REVIEW (NSR)

1. Prevention of Significant Deterioration (PSD)

The facility's source category is not listed in Table A of the definition of "major stationary source" in LAC 33:III.509. As such, the PSD major source threshold is 250 TPY (of any regulated NSR pollutant).

Unit 9 is not classified as a major stationary source under the PSD program. Thus, PSD review is not required.

2. Nonattainment New Source Review (NNSR)

Facility is located in an attainment area; therefore, NNSR does not apply.

3. Notification of Federal Land Manager

The Federal Land Manager (FLM) is responsible for evaluating a facility's projected impact on the Air Quality Related Values (AQRV) (e.g., visibility, sulfur and nitrogen deposition, any special considerations concerning sensitive resources, etc.[3]) and recommending that LDEQ either approve or disapprove the facility's permit application based on anticipated impacts. The FLM also may suggest changes or conditions on a permit. However, LDEQ makes the final decision on permit issuance. The FLM also advises reviewing agencies and permit applicants about other FLM concerns, identifies AQRV and assessment parameters for permit applicants, and makes ambient monitoring recommendations.

If LDEQ receives a PSD or NNSR permit application for a facility that "may affect" a Class I area, the FLM charged with direct responsibility for managing these lands is notified.

The meaning of the term "may affect" is interpreted by EPA policy to include all major sources or major modifications which propose to locate within 100 kilometers (km) of a Class I area. However, if a major source proposing to locate at a distance greater than 100 km is of such size that LDEQ or the FLM is concerned about potential impacts on a Class I area, LDEQ can ask the applicant to perform an analysis of the source's potential emissions impacts on the Class I area. This is because certain meteorological conditions, or the quantity or type of air emissions from large sources located further than 100 km, may cause adverse impacts. In order to determine whether a source located further than 100 km may affect a Class I area, LDEQ uses the Q/d approach.

Q/d refers to the ratio of the sum of the net emissions increase (in tons) of PM_{10}, SO_2, NO_X, and H_2SO_4 to the distance (in kilometers) of the facility from the nearest boundary of the Class I area.

$$Q/d = \frac{PM_{10\,(NEI)} + SO_{2\,(NEI)} + NO_{X\,(NEI)} + H_2SO_{4\,(NEI)}}{\text{Class I km}}^{4}$$

[3] See http://www2.nature.nps.gov/air/Permits/ARIS/AQRV.cfm

[4] If both NNSR and PSD review are required, the higher of the two "net emissions increase" values has been selected. The net emissions increase for NNSR and PSD purposes may be different due to differing contemporaneous periods. If the net emissions increase of any pollutant is negative, the value used in the equation has been set to zero. If the project did not trigger a netting analysis, LDEQ uses the project increase (see §504.A.3 (NNSR) and §509.A.4 (PSD)). In this case, the value will be less than the pollutant's significance level.

Where:

$PM_{10\ (NEI)}$	=	net emissions increase of PM_{10}
$SO_{2\ (NEI)}$	=	net emissions increase of SO_2
$NO_{X\ (NEI)}$	=	net emissions increase of NO_X
$H_2SO_{4\ (NEI)}$	=	net emissions increase of H_2SO_4
Class I km	=	distance to nearest Class I area (in kilometers)

If $Q/d \geq 4$, LDEQ will formally notify the FLM in accordance with LAC 33:III.504.E.1 / LAC 33:III.509.P.1.

The proposed changes do not trigger PSD review or NNSR. Therefore, LDEQ has determined that the proposed project will not adversely impact visibility in Breton National Wildlife Refuge/Caney Creek Wilderness Area, the nearest Class I area.

4. Reasonable Possibility

Since no physical changes or changes in the method of operation are proposed with this permit renewal, there is no "reasonable possibility" that the proposed project may result in a significant emissions increase.

X. ADDITIONAL MONITORING AND TESTING REQUIREMENTS

In addition to the monitoring and testing requirements set forth by applicable state and federal regulations (see Section VIII of this Statement of Basis), a number of "LAC 33:III.507.H.1.a" and/or "LAC 33:III.501.C.6" conditions may appear in the "Specific Requirements" section of the proposed permit. These conditions have been added where no applicable regulation exists or where an applicable regulation does not contain sufficient monitoring, recordkeeping, and/or reporting provisions to ensure compliance. LAC 33:III.507.H.1.a provisions, which may include recordkeeping requirements, are intended to fulfill Part 70 periodic monitoring obligations under 40 CFR 70.6(a)(3)(i)(B).

XI. OPERATIONAL FLEXIBILITY

Emissions Caps

An emissions cap is a permitting mechanism to limit allowable emissions of two or more emissions units below their collective potential to emit (PTE). The proposed permit contains the Blend Tank CAP (GRP135), and the Product Loading CAP (GRP136). The monitoring, recordkeeping, and reporting requirements necessary to ensure compliance with cap emission are give under these cap groups in the Specific Requirements section.

Alternative Operating Scenarios

LAC 33:III.507.G.5 allows the owner or operator to operate under any operating scenario incorporated in the permit. Any reasonably anticipated alternative operating scenarios

may be identified by the owner or operator through a permit application and included in the permit. The proposed permit does not include an alternative operating scenario.

Streamlined Requirements

When applicable requirements overlap or conflict, the permitting authority may choose to include in the permit the requirement that is determined to be most stringent or protective as detailed in EPA's "White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program" (March 5, 1996). The overall objective is to determine the set of permit terms and conditions that will assure compliance with all applicable requirements for an emissions unit or group of emissions units so as to eliminate redundant or conflicting requirements. The proposed permit does contain streamlined provisions.

Louisiana Consolidated Fugitive Emission Program (LCFEP)

Facility complies with a streamlined equipment leak monitoring program.

Compliance with the streamlined program shall constitute compliance with each of the fugitive emission monitoring programs being streamlined. Fugitive emissions are subject to the requirements of 40 CFR 63 Subpart UU (per Table 6 of 40 CFR Part 63 Subpart FFFF), LAC 33:III.2121. Among these regulations, 40 CFR 63 Subpart UU establishes the most stringent leak detection and repair standards. Therefore, fugitive emissions shall be monitored as required by this program.

Unit or Plant Site	Programs Being Streamlined	Stream Applicability	Overall Most Stringent Program
Unit 9- Latex Plant 4041 - Fugitive Emissions (FUG002)	40 CFR 63 Subpart UU (per Table 6 of 40 CFR Part 63 Subpart FFFF)	5% VOHAP	40 CFR 63 Subpart UU
	LAC 33.III.2121 - VOC Control	10% VOC	

XII. PERMIT SHIELD

A permit shield, as described in 40 CFR 70.6(f) and LAC 33:III.507.I, provides an "enforcement shield" which protects the facility from enforcement action for violations of applicable federal requirements. It is intended to protect the facility from liability for violations if the permit does not accurately reflect an applicable federal or federally enforceable requirement.

The proposed permit does not establish a permit shield.

XIII. IMPACTS ON AMBIENT AIR

Emissions associated with the proposed modification were reviewed by the Air Quality Assessment Division to ensure compliance with the NAAQS and AAS. LDEQ did not require the applicant to model emissions.

XIV. COMPLIANCE HISTORY AND CONSENT DECREES

The facility's compliance history can be found in Section 3 of the permit application. It must be disclosed per LAC 33:III.517.E and 517.D.12, if applicable.

No federal or state actions have been issued since the present permit for the facility was issued.

XV. REQUIREMENTS THAT HAVE BEEN SATISFIED

The following state and/or federal obligations have been satisfied and are therefore not included as Specific Requirements.

Source ID	Citation	Description

XVI. OTHER REQUIREMENTS

Executive Order No. BJ 2008-7 directs all state agencies to administer their regulatory practices, programs, contracts, grants, and all other functions vested in them in a manner consistent with Louisiana's Comprehensive Master Plan for a Sustainable Coast and public interest to the maximum extent possible. If a proposed facility or modification is located in the Coastal Zone, LDEQ requires the applicant to document whether or not a Coastal Use Permit is required, and if so, whether it has been obtained. Coastal Use Permits are issued by the Coastal Management Division of the Louisiana Department of Natural Resources (LDNR).

The facility is not located in the Coastal Zone; therefore, a Coastal Use Permit is not required.

XVII. PUBLIC NOTICE/PUBLIC PARTICIPATION

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Written comments, written requests for a public hearing, or written requests for notification of the final decision regarding this permit action may be submitted to:

Ms. Soumaya Ghosn
LDEQ, Public Participation Group
P.O. Box 4313
Baton Rouge, Louisiana 70821-4313

Written comments and/or written requests must be received prior to the deadline specified in the public notice. If LDEQ finds a significant degree of public interest, a public hearing will be held. All comments will be considered prior to a final permit decision.

LDEQ will send notification of the final permit decision to the applicant and to each person who has submitted written comments or a written request for notification of the final decision.

The permit application, proposed permit, and this Statement of Basis are available for review at LDEQ, Public Records Center, Room 127, 602 North 5th Street, Baton Rouge, Louisiana. Viewing hours are from 8:00 a.m. to 4:30 p.m., Monday through Friday (except holidays). Additional copies may be viewed at the local library identified in the public notice. The available information can also be accessed electronically via LDEQ's Electronic Document Management System (EDMS) on LDEQ's public website, www.deq.louisiana.gov.

Inquiries or requests for additional information regarding this permit action should be directed to the contact identified on page 1 of this Statement of Basis.

Persons wishing to be included on the public notice mailing list or for other public participation-related questions should contact LDEQ's Public Participation Group at P.O. Box 4313, Baton Rouge, LA 70821-4313; by e-mail at maillistrequest@ldeq.org; or contact LDEQ's Customer Service Center at (225) 219-LDEQ (219-5337). Alternatively, individuals may elect to receive public notices via e-mail by subscribing to LDEQ's Public Notification List Service at http://www.doa.louisiana.gov/oes/listservpage/ldeq_pn_listserv.htm.

Permit public notices can be viewed at LDEQ's "Public Notices" webpage, http://www.deq.louisiana.gov/apps/pubNotice/default.asp. Electronic access to each proposed permit and Statement of Basis current on notice is also available on this page. General information related to public participation in permitting activities can be viewed at www.deq.louisiana.gov/portal/tabid/2198/Default.aspx.

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APPENDIX A - ACRONYMS

AAS	Ambient Air Standard (LAC 33:III.Chapter 51)
AP-42	EPA document number of the Compilation of Air Pollutant Emission Factors
BACT	Best Available Control Technology
BTU	British Thermal Units
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAM	Compliance Assurance Monitoring, 40 CFR 64
CEMS	Continuous Emission Monitoring System
CMS	Continuous Monitoring System
CO	Carbon monoxide
COMS	Continuous Opacity Monitoring System
CFR	Code of Federal Regulations
EI	Emissions Inventory (LAC 33:III.919)
EPA	(United States) Environmental Protection Agency
EIQ	Emission Inventory Questionnaire
ERC	Emission Reduction Credit
FR	Federal Register or Fixed Roof
H_2S	Hydrogen sulfide
H_2SO_4	Sulfuric acid
HAP	Hazardous Air Pollutants
Hg	Mercury
HON	Hazardous Organic NESHAP
IBR	Incorporation by Reference
LAER	Lowest Achievable Emission Rate
LDEQ	Louisiana Department of Environmental Quality
M	Thousand
MM	Million
MACT	Maximum Achievable Control Technology
MEK	Methyl ethyl ketone
MIK	Methyl isobutyl ketone
MSDS	Material Safety Data Sheet
MTBE	Methyl tert-butyl ether
NAAQS	National Ambient Air Quality Standards
NAICS	North American Industrial Classification System (replacement to SICC)
NESHAP	National Emission Standards for Hazardous Air Pollutants
NMOC	Non-Methane Organic Compounds

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APPENDIX A - ACRONYMS

NOx	Nitrogen Oxides
NNSR	Nonattainment New Source Review
NSPS	New Source Performance Standards
NSR	New Source Review
OEA	LDEQ Office of Environmental Assessment
OEC	LDEQ Office of Environmental Compliance
OES	LDEQ Office of Environmental Services
PM	Particulate Matter
PM10	Particulate Matter less than 10 microns in nominal diameter
PM2.5	Particulate Matter less than 2.5 microns in nominal diameter
ppm	parts per million
ppmv	parts per million by volume
ppmw	parts per million by weight
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
RACT	Reasonably Available Control Technology
RBLC	RACT-BACT-LAER Clearinghouse
RMP	Risk Management Plan (40 CFR 68)
SICC	Standard Industrial Classification Code
SIP	State Implementation Plan
SO2	Sulfur Dioxide
SOCMI	Synthetic Organic Chemical Manufacturing Industry
TAP	Toxic Air Pollutants (LAC 33:III.Chapter 51)
TOC	Total Organic Compounds
TPY	Tons Per Year
TRS	Total Reduced Sulfur
TSP	Total Suspended Particulate
µg/m3	Micrograms per Cubic Meter
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound
VOL	Volatile Organic Liquid
VRU	Vapor Recovery Unit

STATEMENT OF BASIS

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Best Available Control Technologies (BACT) – an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to regulation under this Part (Part III) which would be emitted from any proposed major stationary source or major modification which the administrative authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such source or modification through application of production processes or available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of such pollutant.

CAM - Compliance Assurance Monitoring – A federal air regulation under 40 CFR Part 64.

Carbon Monoxide (CO) – (Carbon monoxide) a colorless, odorless gas produced by incomplete combustion of any carbonaceous (gasoline, natural gas, coal, oil, etc.) material.

Cooling Tower – A cooling system used in industry to cool hot water (by partial evaporation) before reusing it as a coolant.

Continuous Emission Monitoring System (CEMS) – The total combined equipment and systems required to continuously determine air contaminants and diluent gas concentrations and/or mass emission rate of a source effluent.

Cyclone – A control device that uses centrifugal force to separate particulate matter from the carrier gas stream.

Federally Enforceable Specific Condition – A federally enforceable specific condition written to limit the potential to Emit (PTE) of a source that is permanent, quantifiable, and practically enforceable. In order to meet these requirements, the draft permit containing the federally enforceable specific condition must be placed on public notice and include the following conditions:

- A clear statement of the operational limitation or condition which limits the source's potential to emit;
- Recordkeeping requirements related to the operational limitation or condition;
- A requirement that these records be made available for inspection by LDEQ personnel;
- A requirement to report for the previous calendar year.

Grandfathered Status – those facilities that were under actual construction or operation as of June 19, 1969, the signature date of the original Clean Air Act. These facilities are not required to obtain a permit. Facilities that are subject to Part 70 (Title V) requirements lose grandfathered status and must apply for a permit.

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Lowest Achievable Emission Rate (LAER) - for any source, the more stringent rate of emissions based on the following:

a. the most stringent emissions limitation that is contained in the implementation plan of any state for such class or category of major stationary source, unless the owner or operator of the proposed stationary source demonstrates that such limitations are not achievable; or

b. the most stringent emissions limitation that is achieved in practice by such class or category of stationary source. This limitation, when applied to a modification, means the lowest achievable emissions rate for the new or modified emissions units within the stationary source. In no event shall the application of this term permit a proposed new or modified major stationary source to emit any pollutant in excess of the amount allowable under an applicable new source standard of performance.

NESHAP – National Emission Standards for Hazardous Air Pollutants – Air emission standards for specific types of facilities, as outlined in 40 CFR Parts 61 through 63.

Maximum Achievable Control Technology (MACT) – the maximum degree of reduction in emissions of each air pollutant subject to LAC 33:III.Chapter 51 (including a prohibition on such emissions, where achievable) that the administrative authority, upon review of submitted MACT compliance plans and other relevant information and taking into consideration the cost of achieving such emission reduction, as well as any non-air-quality health and environmental impacts and energy requirements, determines is achievable through application of measures, processes, methods, systems, or techniques.

NSPS – New Source Performance Standards – Air emission standards for specific types of facilities, as outlined in 40 CFR Part 60.

New Source Review (NSR) – a preconstruction review and permitting program applicable to new or modified major stationary sources of criteria air pollutants regulated under the Clean Air Act (CAA). NSR is required by Parts C ("Prevention of Significant Deterioration of Air Quality") and D ("Nonattainment New Source Review").

Nonattainment New Source Review (NNSR) – a New Source Review permitting program for major sources in geographic areas that do not meet the National Ambient Air Quality Standards (NAAQS) set forth at 40 CFR Part 50. NNSR is designed to ensure that emissions associated with new or modified sources will be regulated with the goal of improving ambient air quality.

Organic Compound - any compound of carbon and another element. Examples: methane (CH_4), ethane (C_2H_6), carbon disulfide (CS_2).

Part 70 Operating Permit – also referred to as a Title V permit, required for major sources as defined in 40 CFR 70 and LAC 33:III.507.

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PM_{10} – particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers as measured by the method in Title 40, Code of Federal Regulations, Part 50, Appendix J.

Potential to Emit (PTE) – the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design.

Prevention of Significant Deterioration (PSD) – a New Source Review permitting program for major sources in geographic areas that meet the National Ambient Air Quality Standards (NAAQS) at 40 CFR Part 50. PSD requirements are designed to ensure that the air quality in attainment areas will not degrade.

Selective Catalytic Reduction (SCR) – A non-combustion control technology that destroys NO_X by injecting a reducing agent (e.g., ammonia) into the flue gas that, in the presence of a catalyst (e.g., vanadium, titanium, or zeolite), converts NO_X into molecular nitrogen and water.

Sulfur Dioxide (SO_2) – An oxide of sulphur.

TAP – LDEQ acronym for toxic air pollutants regulated under LAC 33 Part III, Chapter 51, Tables 1 through 3.

"Top Down" Approach – An approach which requires use of the most stringent control technology found to be technically feasible and appropriate based on environmental, energy, economic, and cost impacts.

Title V permit – see Part 70 Operating Permit.

Volatile Organic Compound (VOC) – any organic compound which participates in atmospheric photochemical reactions; that is, any organic compound other than those which the Administrator of the U.S. Environmental Protection Agency designates as having negligible photochemical reactivity.